

COOLING USING COMPLIMENTARY TAPERED PLENUMS

ABSTRACT

1 Where a fluid cooling medium cools a plurality of heat-
2 producing devices arranged in a row along a generalized
3 coordinate direction, with a space between each adjacent
4 pair of devices, each space may have a partition that
5 defines a boundary between a first plenum and a second
6 plenum. The first plenum carries cooling medium across an
7 entrance and thence into a first heat-producing device
8 located on a first side of the partition facing the first
9 plenum. The second plenum carries cooling medium away
10 from a second heat-producing device located on a second
11 side of the partition facing the second plenum and thence
12 across an exit. The partition is disposed so that the
13 first plenum becomes smaller in cross-sectional area as
14 distance increases from the entrance, and the second
15 plenum becomes larger in cross sectional area as distance
16 decreases toward the exit.